App. No. 10/678200
Office Action Dated November 4, 2004
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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1, 4, 5, 11, 15 and 16 are amended.

Listing of Claims:

1. (Currently Amended) A semiconductor device comprising a plurality of wirings ~~having corners~~, wherein the wirings are formed adjacent to each other, each wiring comprises a first portion extending in a first direction, a second portion extending in a second direction different from the first direction and a corner at which the first and second portions meet, the first portions of the adjacent wirings are parallel to each other and the second portions of the adjacent wirings are parallel to each other, and a clearance is formed between the adjacent wirings ~~so that the respective parts including the corners of the wirings are formed parallel to each other with a clearance~~,

wherein a protrusion is formed at the ~~a~~ corner of the wirings and the protrusion faces the clearance between the adjacent wirings.

2. (Original) The semiconductor device according to claim 1, wherein the protrusion protrudes outward from the corner.

3. (Original) The semiconductor device according to claim 1, wherein the protrusion is an inward extension bridging a corner portion.

4. (Currently Amended) A semiconductor device, wherein a plurality of conductive film

patterns are formed on the semiconductor substrate, and the conductive film patterns are separated with a certain clearance by a T-shaped groove or a cross-shaped groove, the T-shaped groove or the cross-shaped groove is composed of two linear grooves, and a protrusion is formed at a corner of at least one of the conductive film patterns positioned at a crossing of the ~~respective~~ two linear grooves constituting the T-shaped groove or the cross-shaped groove, protruding from at least one corner of the conductive film patterns toward the T-shaped groove or the cross-shaped groove.

5. (Currently Amended) A semiconductor device, wherein wirings including a first wiring and a second wiring are formed substantially in parallel with a predetermined spacing on the semiconductor substrate, the second wiring having an end at a point intermediate the length of the first wiring, and

at least one small protrusion is formed at a part of the end of the second wiring so as to protrude from a side of the second wiring toward a side of the first wiring perpendicularly with respect to a direction that the second wiring extends,

or at least one small protrusion is formed at a part of a side of the first wiring that faces the end of the second wiring so as to protrude toward the second wiring perpendicularly with respect to a direction that the first wiring extends.

6. (Original) The semiconductor device according to claim 1, wherein the semiconductor substrate is provided further with a bonding pad made of the same film as the wirings, and the wirings and the bonding pad are coated with an insulating protective film having an aperture to expose the bonding pad.

7. (Previously Presented) The semiconductor device according to claim 4, wherein the semiconductor substrate is provided further with a bonding pad made of the same film as the conductive patterns, and the patterns and the bonding pad are coated with an insulating protective film having an aperture to expose the bonding pad.

8. (Original) The semiconductor device according to claim 5, wherein the semiconductor substrate is provided further with a bonding pad made of the same film as the first and second wirings, and the wirings and the bonding pad are coated with an insulating protective film having an aperture to expose the bonding pad.

9. (Original) The semiconductor device according to claim 1, wherein the protrusion has an area ranging from 0.2 μm^2 to 3.0 μm^2.

10. (Previously Presented) The semiconductor device according to claim 1, wherein an insulating protective film is further provided on the clearance between the wirings, and the insulating protective film is contacted as a whole with the clearance between the wirings or the surface of the wirings.

11. (Currently Amended) A method of manufacturing a semiconductor device comprising a plurality of wirings ~~having corners~~, wherein the wirings are formed adjacent to each other, each wiring comprises a first portion extending in a first direction, a second portion extending in a second direction different from the first direction and a corner at which the first and second

portions meet, the first portions of the adjacent wirings are parallel to each other and the second portions of the adjacent wirings are parallel to each other, and a clearance is formed between the adjacent wirings ~~so that respective parts including the corners of the wirings are formed parallel to each other with a clearance,~~

wherein a protrusion is formed at the ~~a~~ corner of the wirings and the protrusion faces the clearance between the adjacent wirings.

12. (Previously Presented) The method of manufacturing a semiconductor device according to claim 11, wherein the method comprises:

forming, on the semiconductor substrate, a bonding pad made of the same film as the wirings,

forming an insulating protective film for covering the wirings and the bonding pad,

forming a patterned photosensitive resin film on the insulating protective film, and

etching selectively the insulating protective film by using the photosensitive resin film as a mask, thereby forming an aperture in the insulating protective film to expose the bonding pad.

13. (Original) The method of manufacturing a semiconductor device according to claim 11, wherein the protrusion protrudes outward to the corner.

14. (Original) The method of manufacturing a semiconductor device according to claim 11, wherein the protrusion is an inward extension bridging a corner portion.

15. (Currently Amended) A method of manufacturing a semiconductor device, wherein

conductive film patterns are provided with a certain clearance by a T-shaped groove or a cross-shaped groove, the T-shaped groove or the cross-shaped groove being composed of two linear grooves, and a protrusion is formed at a corner of at least one of the conductive film patterns positioned at a crossing of the ~~respective~~ two linear grooves constituting the T-shaped groove or the cross-shaped groove, protruding from at least one corner of the conductive film patterns toward the T-shaped groove or the cross-shaped groove.

16. (Currently Amended) A method of manufacturing a semiconductor device, wherein wirings including a first wiring and a second wiring are formed substantially in parallel at a predetermined spacing on the semiconductor substrate, the second wiring having an end at a point intermediate the length of the first wiring, and

at least one small protrusion is formed at a part of the end of the second wiring so as to protrude from a side of the second wiring toward a side of the first wiring perpendicularly respect to a direction that the second wiring extends,

or at least one small protrusion is formed at a part of a side of the first wiring that faces the end of the second wiring perpendicularly with respect to a direction that the first wiring extends.

17. (Original) The method of manufacturing a semiconductor device according to claim 11, wherein the protrusion has an area ranging from 0.2 μm^2 to 3.0 μm^2.

18. (Previously Presented) The method of manufacturing a semiconductor device according to claim 12, wherein an insulating protective film is further provided on the clearance between

the wirings, and the insulating protective film is contacted as a whole with the clearance between the wirings, and the insulating protective film is contacted as a whole with the clearance between the wirings.